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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/675,362	09/30/2003	John P. Miller	F-746	5976

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EXAMINER

FERGUSON, MARISSA L

ART UNIT PAPER NUMBER

2854

DATE MAILED: 06/13/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

AK

Office Action Summary

Application No.

10/675,362

Applicant(s)

MILLER ET AL.

Examiner

Marissa L. Ferguson

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 March 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 7, 9-11, 17, 19 and 20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1,7,9-11,17,19 and 20 are rejected under 35 U.S.C. 103(a) as being anticipated by Fowlkes (US Patent 6,361,163) in view of Hayashi et al. (US Patent 5,829,895).

Regarding claims 1 and 11, Fowlkes teaches an apparatus and method with a transport path conveying a series of documents at a print velocity (44,46), an upstream ink jet print head (70a) fixedly positioned (Column 5, Lines 29-36) contiguous with the transport to print on documents transported thereon, a downstream print head (70b), downstream of the upstream print head, fixedly positioned (Column 5, Lines 29-36) contiguous with transport to print on documents transported thereon (Figure 7) and a controller (220) controlling a first one of the upstream or downstream print heads to print on transported documents (30/40), the controller further switching to a second of the upstream or downstream print heads when the first one undergoes an ink jet maintenance operation, wherein the controller periodically takes the print head that is in use out of service to perform maintenance operations (Column 7, Lines 34-44). However he does not explicitly disclose printing postage indicia on mail pieces traveling

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at a print velocity, a print head that is wiped or purged and whereby subsequent to a maintenance operation the first print head is in a condition to return to service. With regards to returning the print head back to service, it is clear that the print head will return to service in order for the printer to properly function in Fowlkes.

Hayashi et al. teaches an apparatus and a method for printing indicia that discloses postal indicia that are printed on mail pieces and a postage meter coupled to a print head (Column 3, Lines 33-41) and wiping and purging during maintenance operations (Column 4, Lines 7-18).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the invention as taught by Fowlkes to include postal indicia printed on mail pieces and a postage meter as taught by Hayashi et al., since Hayashi et al. produces a visually appealing and a clearly readable image and to also include purging and wiping during maintenance operations as taught by Hayashi et al., since Hayashi et al. teaches that it is advantageous to purge and wipe in order to provide a debris free print head.

Regarding claims 7 and 17, Fowlkes teaches an apparatus and method with drop-on-demand ink jet print heads (70a, 70b, Abstract and Column 4, Lines 51-64).

Regarding claims 9 and 19, Fowlkes teaches the method and apparatus claimed including a controller (220) that triggers print heads (70a,b). However, he does not explicitly disclose a sensor that detects a document approaching print heads and mail pieces. Hayashi et al. teaches a microswitch detector that alerts the printing mechanism when a mail piece is present (Column 4, Lines 11-18) and mail pieces

(Column 3, Lines 33-41). It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the invention as taught by Fowlkes to include a sensor and mail pieces as taught by Hayashi et al., since Hayashi et al. teaches it is advantageous to detect the presence of a mail piece in order to properly position the print mechanism for printing a clear, concise image.

Regarding claims 10 and 20, Fowlkes teaches print heads that are electronically geared to the transport so that variations in print velocity during printing operation will not be affect an image being printed (Column 5, Lines 22-45 and many references throughout patent).

Response to Arguments

2. Applicant's arguments filed 3/29/05 have been fully considered but they are not persuasive. In response to applicant's comments regarding "In that embodiment Fowlkes describes that if one print head malfunctions and is taken out of service, the other print head may be used to print on receivers 30/40 by suitably operating controller 220. In claims 1 and 11, the recited maintenance operation is not a malfunction of the print head, rather it is part of routine operation. In Fowlkes, the malfunctioning print head is not in a condition to be returned to service, as recited in amended claim 1", the examiner notes that in order for the machine to continue to properly function, the print head has to be returned to service. With regard to applicant's argument that Fowlkes does not respond to a "malfunction" of the print head, this argument is more specific than the claims, which include only a "maintenance operation".

3. Regarding applicant's comments, "Hayashi et al. does describe wipe and purge operations used by ink jet print heads, however the Hayashi et al. system is a slow speed system that operates by manual feeling. Therefore, the time required for wipe and purge operations on the print head are not significant in Hayashi et al., and the problem solved by the present invention is never an issue. As such Hayashi et al. does not disclose using more than one print head, and correspondingly, there is no description of switching between print heads during a maintenance operation", the examiner notes Hayashi et al. was not relied upon to reject the claim limitations pertaining to switching. With regard to the speed of Hayashi et al., it is the examiner's position that one having ordinary skill in the art would recognize the advantage of wipe and purge operations on machines of all speeds. Therefore, it would be obvious to modify Fowlkes as proposed above to include the wipe and purge operations of Hayashi et al.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the

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shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marissa L Ferguson whose telephone number is (571) 272-2163. The examiner can normally be reached on (M-T) 6:30am-4:00pm and every other (F) 7:30am-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Hirshfeld can be reached on (571) 272-2168. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Marissa L Ferguson
Examiner
Art Unit 2854

MLF

Andrew H. Hirshfeld
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